<table>
<thead>
<tr>
<th>Grant Application Requirement</th>
<th>Completed? (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project type (1) has been selected.</td>
<td>YES</td>
</tr>
<tr>
<td>Color project maps (if applicable) are included illustrating clearly the proposed project location, existing/proposed service routes and are appropriately labeled.</td>
<td>YES</td>
</tr>
<tr>
<td>A signed and dated Funding Commitment document is included.</td>
<td>YES</td>
</tr>
<tr>
<td>Project Schedule is provided in both narrative and table formats.</td>
<td>YES</td>
</tr>
<tr>
<td>Supporting documentation (Letters of support, ridership documentation, and other supporting documentation) has been included to establish project need.</td>
<td>YES</td>
</tr>
<tr>
<td>Coordination with the adjacent transit providers in the service area has occurred to ensure no duplication of efforts or grant project submissions.</td>
<td>YES</td>
</tr>
<tr>
<td>The Grant Application Project Cost table section has been itemized and completed.</td>
<td>YES</td>
</tr>
<tr>
<td>Grant application submitted meets all stated Service Development Grant criteria.</td>
<td>YES</td>
</tr>
</tbody>
</table>
1. Introduction

On May 29, 2015, the City of Sweetwater (Sweetwater), in coordination with Florida International University (FIU), established the UniversityCity Transportation and Management Association of Sweetwater, Inc. (UTMA) to bundle FIU’s and Sweetwater’s transit services and improve their effectiveness and efficiency.

With a $200,000 commitment from the Florida Department of Transportation (FDOT) pursuant to the initial Public Transportation Joint Participation Agreement (JPA) dated January 9, 2017 as between FDOT and UTMA to secure such amounts as a 50% State Participation of UTMA eligible funds used for day-to-day operations pursuant to the FY2016-2017 Service Development Grant (SDG) award dated September 23, 2015 [1], the UTMA undertook operation of the FIU CATS Shuttle service on Monday, January 9, 2017 based on the terms of a Community Transit Services Agreement (CTSA) fully executed Wednesday, December 28, 2016 as between FIU and UTMA [2]. UTMA community transit service was expanded when it undertook the operation of the Sweetwater Trolley services on Thursday, January 26, 2017 based on the terms of a CTSA fully executed last Wednesday, December 28, 2016 as between Sweetwater and UTMA [3]. The CTSA with FIU pledged $100,000 per year for three years paid to UTMA by FIU for these and expanded community transit services and the CTSA with Sweetwater pledged $400,000 per year for three years paid to UTMA by Sweetwater for these and expanded community transit services.

UTMA facilitated the operations of the CATS Shuttle and Sweetwater Trolley via an agreement as between UTMA and Limousines of South Florida for the operations, insurance and maintenance of the community transit fleet that was entered as of December 13, 2016. [4]

To develop an innovative transit service in the UniversityCity area, UTMA needs continuing support from FDOT so that UTMA would be able to provide more frequent and expanded community transit services to link destinations in Sweetwater and at FIU’s Modesto A. Maidique Campus (MMC) and Engineering Center (EC) with 836 Express Bus Stations being built by Miami-Dade County designated as Panther Station and
Dolphin Station [5] in the context of pedestrian-oriented transit access infrastructure improvements and the development of the Informed Traveler Program and Applications (ITPA) as initially funded by the 2013 TIGER Discretionary Grant awarded to FIU [6] and with related projects that will be built with funds provided by FIU, Sweetwater, Miami-Dade County, and FDOT.

FDOT has already awarded to UTMA a FY2017-2018 SDG in the amount of $500,000 [7] that will support a new JPA after July 1, 2017 and now the UTMA seeks a third year FDOT award for $500,000 based upon this FY 2018-2019 SDG proposal.

2. What kind of transit services is being developed at UniversityCity?

Community transit has been typically associated responding to local transportation needs such as trips from home to local businesses and shopping destinations. Sometimes community transit is operated to respond to the lunchtime and other daytime trip needs of a downtown area or business park. While small transit vehicles have been used by Tri-Rail to conclude trips from their stations to nearby destinations of employment, shopping areas, and institutions of higher education using scheduled fixed route shuttle services, community transit has not been used to provide a smart and demand responsive feeder system between community destinations and rapid transit service in the context of:

- High quality urban places as observed by William Whyte in “The Social Life of Small Urban Spaces” (1980) configured as pedestrian-oriented transit access infrastructure improvements
- Smart parking
- An advanced electronic wayfinding system to optimize smart and efficient access to parking, local destinations, community transit and rapid transit.

At UniversityCity, it is expected that there will be over $15 million in TIGER/TAP/match/other funded improvements to pedestrian-oriented transit access infrastructures, consisting of the following and as illustrated at Section 12:

- Pedestrian-oriented shared-use bridge spanning US 41 just west of the US 41/SW 109th Avenue intersection (UniversityCity Bridge) that connects two plazas developed at the bases of the UniversityCity Bridge termini staircases and elevators (i.e., one bridge terminus at MMC and one bridge terminus in Sweetwater); the south plaza at MMC will connect to walkways and plazas that extend to the Steven and Dorothea Green Library (Green Library) and the north plaza will connect to complete street improvements on SW 109th Avenue northward to SW 6th Street (i.e., narrowing the traffic lanes to two 10-feet lanes and widening the sidewalks along with improvements to the landscape and hardscape)
- Advanced Intermodal and Multimodal Station (AIMS) stop for the Golden Panther Express east of Market Station/Parking Garage 5 (PG-5)
- Sweetwater’s Brothers to the Rescue Memorial Plaza (BTTRMP) on the east side of SW 109th Avenue and north of the Tamiami Canal/US 41

Using $265,261 in available planning funds from Miami-Dade Expressway Authority (MDX), $2,156,832 in 2013 TIGER Discretionary Grant funds, and $212,004 in FIU TIGER match funds, the High Performance Database Research Center (HPDRC) at the College of Engineering and Computing (CEC) has developed with others the ITPA under the umbrella of National Science Foundations’ Industry-University Cooperative Research Center for Advanced Knowledge Enablement (I/UCRC-CAKE) at FIU. [8] ITPA is an advanced
consumer-oriented, predictive, and multimodal transportation management software and technology system that can disperse travelers in time, place, and modes, and to alternative destinations; it provides smart parking and smart transit guidance to optimize trip segments and intermodal transfers achieved as short distance pedestrian, bicycle, or community transit movements.

Using $342,900 of TIGER match funds from FIU and Sweetwater, CEC’s Department of Mechanical and Materials Engineering (MME) has undertaken efforts to acquire, rebuild, repair and enhance three vehicles, two of which are electric and one diesel powered, to be used for more frequent community transit crossing the US 41 intersection at SW 109th Avenue via a new electric rubber-tired trolley or similar service between City Hall and Green Library. Using and additional $171,450 in FY2015-2016 SDG state funds [9] and a proposed up to $342,900 in matching funds and assets from FIU, Sweetwater and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), MME will provide to UTMA an improved 10-vehicle ITPA-enabled community transit fleet that will enhance the customer experience and improve UTMA community transit services such that it functions as an advanced feeder service between UniversityCity destinations and access points for rapid transit in Miami-Dade County. The $171,450 is authorized as a 50% State Participation in eligible expenditures made available through a JPA as between FIU and FDOT fully executed last February 1, 2016. [10]

UTMA strives to unite the nation’s fourth largest public university’s students and faculty, and the residents of a mainly working-class, Hispanic (95%) city with regularly scheduled 836 Express Bus and other direct or on-demand service to the Miami Intermodal Center [11] through the integration of: i) pedestrian-oriented transit access infrastructure that includes AIMS for rapid transit access; ii) ITPA-enabling software and technology to provide smart parking and smart transit guidance to travelers; and, iii) more frequent, ITPA-enabled, smart, demand responsive community transit services associated with smart, ITPA-enabled, demand responsive, multipurpose, photovoltaic community transit stops developed as high quality urban places. Once improved multimodal access to MIC is achieved, many other transportation choices that can be accessed from there: Miami International Airport [12] via the MIA Mover [13]; Amtrak [14]; Tri-Rail [15]; Metrorail [16]; Metrobus [17]; Downtown Miami destinations and the Port of Miami via Metrorail to Metromover [18]; Miami Beach via the Miami Beach Airport Flyer [19]; Fort Lauderdale, West Palm Beach and Orlando once Brightline becomes operation later in 2017 [20] at the Miami Central Station in downtown Miami [21]; and, Tri-Rail’s Coastal Link [22] when it becomes operational at the Miami Central Station in downtown Miami.

To achieve such a fast and slow transformative multimodal and intermodal system of transportation (FASTMIST), UTMA will need additional operating funds from a FY2018-2019 SDG as proposed herein (i.e., $500,000) and for all the various entities involved (i.e., FIU, Sweetwater, Miami-Dade County) to undertake and complete the plans they have made for: i) improving community transit services for destination outwardly for distances of one to two miles; ii) deploying the 836 Express Bus Services for rapid transport between UniversityCity and MIC; iii) constructing the Panther Station and Dolphin Station to provide AIMS access to rapid transit; iv) and, examining through a sub-area mobility study or otherwise how over time to build linked pedestrian, bicycle, and community transit corridors for localized movements and elevated dedicated transit and freight express lanes for regional movements.

The UTMA transit service will be integrated with ITPA as an advanced software system for traveler information and guidance [23] which, as part of the UniversityCity Prosperity Project, was announced as a FIU’s 2013 TIGER Discretionary Grant award [24] and developed consistent with the initial ITPA descriptions as found in the UniversityCity Prosperity Project proposal [25]. ITPA will be installed into the UTMA Operations Center by the HPDRC and operated by LOSF during the latter half of 2017 at the direction of the UTMA Operation Manager, who will be acting as a working foreman to assure smart
parking and smart community transit services are provided as planned; to function as advanced feeder services to rapid transit.

The TIGER Award Agreement set the terms and budget for ITPA expenditures of TIGER and match funds [26], with those terms and budget being slightly revised by Addendum No. 1 [27]. Additional funds to develop and deploy ITPA-enabling software and technology in the community transit vehicles to be owned and operated by the UTMA were identified in the FY2015-2016 FDOT Service Development Grant [28] along with the funds to rebuild, repaired, and enhanced a fleet of ten ITPA-enabled vehicles.

The UTMA is now in the process of setting up an ITPA Operations Center through an agreement to be negotiated with FIU for HPDRC services such that later in the year it can be fully operational at a location where the UTMA community transit service provider, Limousines of South Florida (LOSF), provides dispatch services to other Miami-Dade County community transit systems. UTMA has increased bus capacity by allowing some passengers to stand when all seats are taken and maintained the provision of the Sweetwater Trolley and CATS Shuttle services as required. First observations indicate that ridership has increased since the commencement of UTMA operations [29].

The UTMA transit services currently connect riders with the Miami-Dade County Metrobus service that stops at the FIU Bus Terminal on SW 107th Avenue just south of the MMC entrance at SW 16th Street (i.e., access to Metrobus Route 8, 11, 24, 71, and 82) and with several MMC destinations, EC, International Mall, Dolphin Mall, local businesses and shopping centers, parks, Sweetwater City Hall, Sweetwater Youth Center, and many other hubs.

The UTMA has the capacity to operate as a smart local transit authority and simultaneously as a feeder system to other local and regional transit systems such as Doral and Miami-Dade County. The UTMA offers service from 6:00 a.m. to 11:00 p.m. on smaller shuttles that circulate between FIU and Sweetwater and provide service from 8:00 AM to 6:30 PM on a larger trolley that connects to Miami-Dade County’s FIU Bus Terminal, Sweetwater, the Dolphin Mall, International Mall, the Miami Free Zone, and many shopping destinations. The UTMA plans to acquire electric vehicles whenever the opportunity arises [30] so that the fleet operational expense is reduced. This will promote sustainability and innovative endeavors involving private-public partnerships and eventually the future creation of an autonomous transit system (comparable to Freebee operations that fund small electric shuttle with advertising revenues). [31]

Solutions tested in the highly innovative and responsive UTMA system will not only improve public transit use significantly in the University City area, but when shown to be successfully providing feeder bus passengers to express buses in a high-quality urbanized pedestrian-oriented community to increase paying customers and reduce or eliminate operating subsidies, these solutions will also serve as a blueprint for successful improvements of public transit nationwide.

The requested FDOT funding is 100% matched by local funds: Sweetwater will contribute 80% ($400,000) and FIU will contribute 20% ($100,000) towards UTMA’s operations (see attached letters of funding commitment).

The proposed transit measures are fully compliant with the Sweetwater’s Comprehensive Plan [32], which commits Sweetwater to promote development providing “multi-modal transportation connectivity” (pg. 22, objective 7), and to promote “alternate transportation modes, including mass transit” (pg. 22, policy 7.1); and FIU’s Campus Master Plan 2010-2020 [33], which commits FIU to “develop, operate, and maintain a safe and efficient multi-modal circulation system” (pg. 11-1, goal 1.1), to “encourage the use of local connector public transportation” (pg. 11-6, policy 3.1.2.1) and to “coordinate with Miami-Dade Transit and local/host communities” (pg. 11-1, objective 1.1.1).
3. Project Schedule

Following UTMA’s incorporation on May 29, 2015, several milestones have been accomplished as part of a process (see Table 1) which resulted in the commencement of transit operations in January 2017. While the FY2015-2016 FDOT Service Development Grant awarded to FIU supported rebuilt, repair and enhancement of Sweetwater’s and FIU’s fleet of community transit, the partially-awarded FY2016-2017 FDOT Service Development Grant supports the first eight months or so of operations, and the $500,000 FY2017-2018 FDOT Service Development Grant supports a full year of operations thereafter. This proposed third operations grant (i.e., this FY2018-2019 SDG proposal) will support the transit system’s third year of operations during the 2019 calendar year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>May 29, 2015</td>
<td>UTMA Incorporation</td>
</tr>
<tr>
<td></td>
<td>Initial board: Mayor Orlando Lopez (President and Director), Vice Mayor Jose M. Diaz (Vice President), Thomas F. Gustafson (Secretary and Treasurer)</td>
</tr>
<tr>
<td>August 26, 2015</td>
<td>Swearing in of new board</td>
</tr>
<tr>
<td></td>
<td>Amy Gonzalez (Chairperson), Robert Herrada (Secretary and Treasurer), Tom Hartley, Phil Procacci, Raul Rodriguez</td>
</tr>
<tr>
<td>May 20, 2016</td>
<td>Commencing hiring process</td>
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<td></td>
<td>Board approval to arrange for Interim UTMA Administrator to manage UTMA day-to-day matters and begin to determine how best to hire full time staff as an Operations Manager and other operational personnel; competitive review of options for Operations Manager selection after public notice of job opportunity occur in May and June 2017</td>
</tr>
<tr>
<td>January 2017</td>
<td>Commencing UTMA community transit services and vehicle title transfers</td>
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<tr>
<td></td>
<td>Ownership of ten transit vehicles as detailed in FY2016-2017 SDG proposal are being transferred from City of Sweetwater and FIU to UTMA as they are used in UTMA transit service (i.e., MPV-1, MPV-2, SW-2 and SW-6 so far) and the remainder vehicles will be transferred later this year as vehicle improvements are completed by MME and/or the vehicle use is required by UTMA for community transit services</td>
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<tr>
<td>January 2017</td>
<td>Commencing repair and technology equipment</td>
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<td></td>
<td>As detailed in FY2015-2016 FDOT SDG proposal and the JPA fully executed February 1, 2016 with the time extension granted on October 10, 2016 providing for completing vehicle improvements by December 31, 2017</td>
</tr>
<tr>
<td>June 30, 2017</td>
<td>Submittal of the UTMA SSPP to FDOT; Commencing efforts to draft a Transit Development Plan; and UTMA website fully operational</td>
</tr>
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<td></td>
<td>First assignment of the UTMA Operations Manager</td>
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<tr>
<td>August 21, 2017</td>
<td>FIU classes begin - Commencing information campaign; Operations Center established at LOSF</td>
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<tr>
<td>Date</td>
<td>Event</td>
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<td>---------------------</td>
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<tr>
<td>September 30, 2017</td>
<td>Engage Advertisers</td>
</tr>
<tr>
<td>December 30, 2017</td>
<td>Commencement of Expanded Operations using the proposed two 9-passenger electric shuttles along with the rest of the improved ITPA-enabled ten-vehicle fleet</td>
</tr>
<tr>
<td>September 2017</td>
<td>Start of second year of full operations upon full execution of the next JPA</td>
</tr>
<tr>
<td>November 2018</td>
<td>Completion of a ITPA tracking and related improvements and expanded transit guidance capacity</td>
</tr>
<tr>
<td>September 2018</td>
<td>Start of third year of full operations</td>
</tr>
<tr>
<td>December 2018</td>
<td>Diesel engine/vehicle replacement</td>
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**Table 1 – UTMA Transit Service Development timeline**

### 4. UniversityCity Enhanced Community Transit

The proposed UTMA services have now replaced the former community transit services of FIU and Sweetwater (FIU CATS Shuttle and Sweetwater Trolley service) and UTMA services will in time, subject to UTMA Board approvals, consist of four elements or some variation thereof (see Maps 4 and 5), integrated with the ITPA way-finding and passenger information system (for details see [8] and [23]). The LCTR Transit Office is examining for the UTMA Board the route, station schedule options, including the following as previous proposed:

- **The Central Route** will be served by one vehicle and will connect the newly developed Sweetwater Main Street, BTTRMP, MMC, and the Panther Station; this corridor would comprise the core UniversityCity area. This route would also link with EC, Sweetwater Elementary School and Senior Center, and other trip generators.
- **The Northern Route** will be served by one vehicle and will connect the core UniversityCity area to the Li’l Abner Mobile Park, as well as the commercial properties north of SR 836, especially Miami International Mall, Dolphin Mall, the Dolphin Station, and other noted destinations (e.g., Courtyard Miami at Dolphin Mall, IKEA, Keiser University, University of Phoenix Miami Learning Center, Gold Coast Schools, La Covacha, and Miami Free Zone).
• The Southern Route will be serviced by two vehicles and will connect MMC with the core UniversityCity area and EC. This will develop a new transit service for FIU students to conveniently get around on campus, travel between MMC and EC, and get to the dormitories for 5,000 students or more which are being developed in Sweetwater along SW 109th Street.

• Even with these three routes in place, major areas, especially in eastern and western Sweetwater, do not have convenient access to public transit. UTMA will therefore establish a Demand-Responsive Transit Base Route (served by one vehicle), connecting northern, eastern, and western Sweetwater to the UniversityCity core area. While this service follows a fixed route, it can deviate from it in response to transit requests collected through ITPA.

In addition, based on the likelihood that TIGER match funds will be available to buy two 9-passenger electric shuttle vehicles, a route defined by the following image has been suggested, increasing the frequency wherein vehicle cross US 41 so that with the UniversityCity Bridge and community transit options there is less reason for anyone to want cross US 41 at-grade as a pedestrian or bicyclists.

In combination, the described services establish a high frequency transit corridor in the UniversityCity core region of Main Street/SW 109th Avenue, UniversityCity Bridge northside and southside plazas, BTTRMP, AIMS Stop east of PG-5, and Panther Station at PG-6, thus facilitating a pedestrian-oriented corridor from SW 4th Street in the north to University Drive/SW 10th Street in the south. This highly innovative responsive system will be not only significantly improving public transit in the UniversityCity area, but when shown to be successfully providing feeder bus passengers to express buses and over time to other rapid transit in an urbanized pedestrian-oriented community. By this means, there is an
opportunity to reduce or eliminate operating subsidies such that such smart and frequent community transit systems will serve as a blueprint for successful improvements of public transit nationwide.

UTMA will seek approval from the Miami-Dade County Transportation and Public Works Department (DTPW) for a number of route adjustments for its MDT 212 Sweetwater Circulator (see maps 4 and 5): the route might be extended to the: i) east to include the new commercial developments along West Flagler Street, especially the Target/Publix shops at NW 100th Avenue and Walmart shopping area at NW 92nd Avenue; and, ii) south to include destinations along UniversityCity Main Street/SW 109th Avenue such as City Hall, BTTRMP, the UniversityCity Bridge southside and northside plazas, and Panther Station.

All UTMA vehicles will be equipped with ITPA technology, including a cellular connection to the ITPA server for real-time and predictive updates on traffic conditions and estimated numbers of waiting passengers at participating bus stops, a GPS transceiver for real-time location updates, a touch screen device for driver interaction, cameras and pattern recognition software to estimate the number of passengers in real-time, and a passenger information screen. The vehicles will thus be the transit component of a very innovative traffic management system developed at HPDRC.

In addition to the described measures, FIU also will consider plans to equip FIU’s inter-campus Golden Panther Express service with ITPA technology. This express service might be used to establish a further connection of Panther Station and the UniversityCity area to: Miami Intermodal Center (MIC) and local, regional and national destinations via Amtrak, Tri-Rail, Metrorail, and Metrobus; and to Miami International Airport (MIA) and state, national and global destinations.

UTMA services will connect to several Bus Rapid Transit elements: The UTMA smart community transit service with smart parking will provide a feeder bus service to the express bus services of the Golden Panther Express, SR 836 Express, and other express bus services over time. The community transit frequency is expected to be 10 minutes or so to provide access to express bus stops and stations.

Managed lanes on the HEFT and Dolphin Expressway will in time provide better travel times for any express bus service provided. The 2013 TIGER/UniversityCity proposal assumed an AIMS-like Panther Station built over time at Parking Garage 6 and the current TIGER Award Agreement will provide for improvements for a Golden Panther Express stop east of Parking Garage 5. As the MDT proposed 836 Express plans are developed, further improvement will hopefully be designed and built at Parking Garage 6 including, roadway access from US 41, elevated platforms within and outside Parking Garage 6, and additional landscaped and covered areas outward from and north of Parking Garage 6.

Parking Garage 6 has already built out centralized air-conditioned area adjacent to where the 836 Express buses will unload that in time will be enlarged as a transit waiting area with food service, retail shops and stores like those used that might be located at an airport gate. UTMA vehicles will be ITPA-enabled smart community transit when customers, drivers and the operations center via ITPA communications and analysis better understand how to optimize each trip. Charging stations, Wi-Fi, more comfortable seating, handholds for standing passengers, and storage areas will be evaluated for each vehicle to enhance the customer experience and when new vehicles are purchased, lower floor and electric models will be preferred.

Additionally, this effort is looking outside of its immediate UniversityCity service area with the intent of becoming a sub-regional effort. The UTMA has already commenced talks with the neighboring City of
Doral, which shares common services areas/corridors such as 107th Avenue and NW 25th Street with the UTMA. Both entities have identified synergies and opportunities to more efficiently connect greater numbers of residents to anchor institutions such as FIU, Dolphin Mall, Ikea and the Miami Free Zone have been explored. Similarly, the UTMA will reach out to cities and communities in mid-to-late 2018 that encompass the shared area of Western Miami-Dade County including: communities westward of FIU adjacent US 41 outward to the proposed Tamiami Station [34], The City of Medley, City of Hialeah Gardens, and the City of Miami Lakes.

The UTMA and Sweetwater will also increase transit access to riders in wheel chairs by adding over time ramps that directly lead to bus stops, as the ramps to some bus stops are currently not adjacent to said stops. Working with LOSF, UTMA will encourage those travelers in wheelchairs to become familiar with Miami-Dade County and other paratransit services and provide for access to same through improvements to ITPA developed as funding become available.

To increase ridership, the UTMA will be asking MME to add straps or bars as necessary to improve travel experience for passengers who stand-up during typically short community transit trips. Numerous rider interviews have revealed that a strong demand for standing-up ridership options exists.

The UTMA staff and its LCTR Transit Program consultant are actively examining all routes and interviewing riders to identify duplication of efforts, eliminate unnecessary delays, identify additional stops responsive to riders’ demands (along with identifying unused/underutilized stops). In its first months of operation, the UTMA has increased average ridership when compared to the ridership of Sweetwater or FIU CATS vehicles operating independently. [35]

5. ITPA Maintenance and Improvements

FIU proposes the following project as a proposed sub-award to the FY2018-2019 FDOT Transit Service Development Grant (SDG) application by the UTMA.

ITPA Phase 1 is an US DOT 2013 TIGER V Discretionary Grant funded consumer-oriented, predictive, and multimodal transportation management software and technology system developed by HPDRC in cooperation with industry, academic, and municipal partners. ITPA provides both customized real-time and predictive information to individual users about multimodal and intermodal transportation conditions, as well as innovative decision support for public service providers. As Sweetwater residents are 95% Hispanic, the ITPA smart-phone app will be bilingual (English and Spanish) using FY2017-2018 SDG funds.

In addition to ITPA maintenance and training, FIU proposes as part of the FY2018-2019 FDOT SDG two custom-tailored extensions to ITPA based on the input received from the UTMA Board. While the improvements are relatively small and cost-effective compared to the initial development of ITPA, they will yield a large benefit to the Sweetwater, FIU, and the UTMA transit customers.
Troubleshooting, Maintenance, Training, and Guidance

HPDRC will maintain UTMA’s ITPA installation and fix bugs reported by UTMA during FY2018-2019. In addition, HPDRC will provide new training and guidance sessions for UMTA’s ITPA operators or UTMA members, with special focus on new ITPA functionalities. These will cover the following topics:

- New ITPA functions and features
- How to use the ITPA UniversityCity smart-phone app
- How to provide the ITPA UniversityCity smart-phone app to residents and community members
- How to use the ITPA Operation Center module to track transit vehicles
- How to use the ITPA Operation Center module to track parking availability
- How to communicate with HPDRC to request further guidance, maintenance, and to report bugs

ITPA Development of Improved Vehicle Tracking, Passenger Counting, and Route Scheduling

ITPA Phase 1’s primary functionality is user-centric, i.e. tailored to give consumers advice as to the best available transportation options. To provide its users with the necessary information ITPA includes a basic vehicle tracking system. The current system, though, is not yet tailored to give transportation providers detailed information on vehicle position over time, schedule adherence, passenger counts, or detailed source/destination matrices.

HPDRC will develop a system to provide this missing functionality, i.e. enhanced vehicle tracking, schedule adherence statistics, passenger counting and additional data entry capabilities, including those regarding routing, scheduling, rotations, and vehicle assignments. The resulting data will be available to UTMA’s operators in desired levels of aggregation both in real-time and in report form. It will also be delivered in real-time in combination with other information useful to ITPA users and UTMA transit passengers via the ITPA smart-phone app and in-vehicle dynamic displays on UTMA buses.

The proposed development will alleviate the need for costly third-party software systems to perform said activities.

HPDRC will also develop an ITPA extension allowing its users to request multi-modal and inter-modal routing direction, including UTMA transit and participating MDT services (including Metrobus, Metromover, and MIA People Mover services). The routing function will include guidance regarding walking from a starting position to participating transit vehicles, riding them, transferring between services and modes, and walking to a destination therefrom. After the user indicates desired starting time, starting location, and destination, the ITPA smart-phone app will allow to select one of the alternative routes offered, and display the chosen route in a low-complexity and user-friendly way. The described ITPA improvements have the support of the UTMA Board and are provided for herein at their direction and with their approval.

Sole Source Justification

Regarding the design and development of ITPA Phase 1 as part of the TIGER V UniversityCity Prosperity Project, the US DOT Federal Highway Administration (FHWA) has found on May 20, 2014 that using FIU faculty and staff labor, equipment, materials, and supplies furnished by FIU under their direct control (force accounts) is essential, beneficial, and cost effective [36]. With this Public Interest Finding, the FHWA
found that the use of FIU force accounts (i.e., FIU faculty, students and staff) and sole source contracting for FIU’s partners IBM and Pirouette Software Consulting was in the public interest.

The proposed ITPA maintenance, improvements, as well as training and guidance, are integral parts of ITPA, a computationally challenging transportation demand and traffic management project led by FIU faculty, students, and staff. UTMA and FIU believe that it is in the public interest that for a fair and fixed price HPDRC personnel should be retained to design, develop, and deploy the project improvements as described herein without the need to use a competitive bidding process.

ITPA is an FIU product that was conceptualized and created by FIU personnel. Given the unique, transformative, innovative, and integrated components of the project being described above, the public interest will be served to use such a nationally recognized grouping of experts, with a unique skillset and deep knowledge of computing and computational transportation sciences. HPDRC personnel would design, develop, and deploy the ITPA improvements to UTMA who has the rights to use such ITPA software and technologies through term of the CTSA as between FIU and UTMA; they have been organized into a team to achieve the proposed system. Their skill set includes:

- Integrated ITS design and development
- Computational transportation sciences and related areas, including those directed at smarter transit and parking recommendation and management
- Development of algorithms, data structures, and software for complex data-intensive applications
- Integration of high-resolution aerial imagery and mapping with GIS application software
- The integration of internationally and nationally sourced technologies and platforms.

This creates a situation in which the rights and responsibilities of the community at large are so affected as to require a special course of action. UTMA and FIU therefore ask FDOT to accept this course of action to authorize UTMA (with whatever guidance FDOT might want to provide) to directly contract with FIU for the: i) HPDRC faculty, student, and staff labor; and ii) the software, equipment, materials, and supplies furnished by FIU under the direct control of UTMA. UTMA requests that in awarding the FY2018-2019 SDG funds that it also accepts the conclusion of the UniversityCity Public Interest Finding (PIF) to support the negotiations of a sole source agreement with FIU for such HPDRC personnel efforts.

6. Funding

The requested funding is 100% matched by local funds. For FY2018-2019, Sweetwater will contribute $400,000, FIU will contribute $100,000 pursuant to their respective Community Transit Services Agreements. See [2] and [3] and attached letters of funding commitment. These funds will be paid to and administrated by the UTMA.

There is a value that has been calculated arising from the transfer of vehicle titles by FIU and Sweetwater, when they are donated to UTMA after the vehicles are rebuilt, repaired, and enhanced using the FY2015-2016 SDG awarded to FIU. That appraised valuation of vehicles is being addressed in the JPA fully executed February 1, 2016 as between FIU and FDOT. In addition, the use of ITPA during the term of the CTSA has a yet to-be-determined value and it is assumed that there may be an opportunity to generate revenue
from ITPA-enabled smart community transit and parking guidance system. Due to the speculative value of such contributions to UTMA, it is not quantified herein, although it may represent additional match funds above the match requirement associated with the FY2018-2019 Service Development Grant.

7. Success criteria

As we provide a substantially higher service quality by establishing a more available, convenient, and economical public transit system, our main success criteria are the increases in ridership and decrease of subsidies. Evaluating geo-located data from bus trackers, the system will yield reports over time of day, days of the week and geographical areas.

1. The increase of ridership will be indicated by the:
   a. Total number of passengers
   b. Average number of passengers per vehicle
   c. Average number of passengers per trip

2. The reduction of subsidies will be indicated by:
   a. Total amounts of subsidy per operational period
   b. Subsidies per passenger
   c. Subsidies per traveled vehicle mile
   d. Subsidies per traveled per passenger vehicle mile

The measurements will start before January 9, 2017 as to the CATS Shuttle and before January 24, 2017 as to the Sweetwater Trolley (the respective deployment dates of regular service), to establish a base line. After the deployment, there will eventually be constant real-time reports on ridership, as well as brief monthly reports. These reports are currently available via TransLoc for the CATS service. Sweetwater provides ridership reports on the Sweetwater trolley. TSO Mobile data is used elsewhere in South Florida associated with the services provided by LOSF.

Reports on the decrease of subsidies will be provided in detailed quarterly reports beginning in 2018.

It is assumed that by 2018, revenue will be generated from the use of ITPA combined with product placement strategies and advertising revenues and the development of revenue producing (e.g., advertisement and food truck revenues) smart, ITPA-enabled, multipurpose community transit stations developed as high quality urban places observed by William Whyte in “The Social Life of Small Urban Spaces” (1980).

A final measure of success will be how well the UniversityCity efforts are received by the US DOT when it awards 2017 TIGER Discretionary Awards. Without help from FDOT, FIU or Miami-Dade County, Sweetwater quickly put together last year a substantial 2016 TIGER Discretionary Grant proposal. [39] While the UniversityCity Part 2 TIGER award was not approved, like the UniversityCity Prosperity Project before it, an initial rejection was expected. If with greater support and collective efforts, a revised and better 2017 TIGER Discretionary Grant proposal is present to the US DOT, significant benefits will be derived by FDOT and Miami-Dade County when this UTMA feeder system increase significantly the Smart Plans customer base and other destination make similar changes adjacent their terminal stations (i.e.,
pedestrian-oriented transit access infrastructure and ITPA-enabled smart parking and smart community transit improved to enhance customer experience).

The complete street improvements suggested in the 2016 TIGER Discretionary Grant submittal were resubmitted to the Florida Legislature this year as a proposed appropriations item and this proposal has been accepted as a $500,000 appropriation in the final budget approved by the Florida Legislature. If the appropriation survives a gubernatorial veto message, then Sweetwater will have a $500,000 match of state funds to present in a revised and improved 2017 TIGER Discretionary Grant proposal for UniversityCity Part 2.

In the event this third-year SDG proposal is awarded funds, the opportunity to grow UniversityCity into the intended reinvention of multimodal transportation will be more likely.
8. Maps

A. Current Routes

Map 2 - MDT and FIU Golden Panther Express
Map 4 - FIU CATS [38]
B. Proposed Improved UniversityCity Transit Services Routes

Map 5 – UniversityCity Transit Services, overview
Map 6 - UniversityCity Transit Services, details
Map 7 - University City Transit Services, connection to major transit hubs
9. Funding and Project Cost Table

Funding table

<table>
<thead>
<tr>
<th>Funding institution</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Sweetwater (80% match)</td>
<td>$400,000.00</td>
</tr>
<tr>
<td>Florida International University (20% match)</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>FDOT Service Development Grant (requested)</td>
<td>$500,000.00</td>
</tr>
<tr>
<td>UTMA of Sweetwater, Inc. (non-match earned funds, estimated)</td>
<td>$125,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,125,000.00</strong></td>
</tr>
</tbody>
</table>

Project cost table for FY 2018-2019

<table>
<thead>
<tr>
<th>Description</th>
<th>UTMA/SW</th>
<th>FIU match</th>
<th>SW match</th>
<th>FDOT grant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations of Southern Line (1)</td>
<td>$85,000.00</td>
<td></td>
<td>$175,000.00</td>
<td>$260,000.00</td>
<td></td>
</tr>
<tr>
<td>Operations of Central Line (1)</td>
<td></td>
<td>$85,000.00</td>
<td>$45,000.00</td>
<td>$130,000.00</td>
<td></td>
</tr>
<tr>
<td>Operations of Northern Line (1)</td>
<td></td>
<td>$85,000.00</td>
<td>$45,000.00</td>
<td>$130,000.00</td>
<td></td>
</tr>
<tr>
<td>Operations of Demand-Responsive Transit Base Line (1)</td>
<td></td>
<td>$105,000.00</td>
<td>$25,000.00</td>
<td>$130,000.00</td>
<td></td>
</tr>
<tr>
<td>Vehicle maintenance (2)</td>
<td>$10,000</td>
<td>$25,000.00</td>
<td></td>
<td>$35,000.00</td>
<td></td>
</tr>
<tr>
<td>UTMA of Sweetwater Management and Board of Directors (3)</td>
<td>$15,000.00</td>
<td>$115,000.00</td>
<td>$130,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITPA Maintenance and Extensions (4)</td>
<td></td>
<td></td>
<td>$185,000.00</td>
<td>$185,000.00</td>
<td></td>
</tr>
<tr>
<td>Transit and/or parking services associated with special interest events or other fee earning services (5)</td>
<td>$125,000.00</td>
<td></td>
<td></td>
<td>$125,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total of required funds</strong></td>
<td><strong>$125,000.00</strong></td>
<td><strong>$100,000.00</strong></td>
<td><strong>$400,000.00</strong></td>
<td><strong>$500,000.00</strong></td>
<td><strong>$1,125,000.00</strong></td>
</tr>
</tbody>
</table>

(1) Gas, oil, drivers, with any vendor contracts
(2) Minimum maintenance due to recently completed major maintenance refurbishing under 2013 TIGER award agreement and 2015-2016 FDOT SDG
(3) Assume executive director, chairperson, secretary/treasurer, and students hired to monitor the operations center
(4) Intelligent Traveler Program and Applications (ITPA) maintenance, training, and extensions, as described in section 4.
(5) Funds expected to be raised through UTMA through transit and parking event services contracts and other fee earning services when vehicles not needed for community transit services.
10. Funding Commitments

City of Sweetwater

May 25, 2017

Mr. Jim Wolfe
District Six Secretary
Florida Department of Transportation District Six
1000 NW 113 Avenue
Miami, Florida 33172

Re: FDOT Service Development Grant FY 2018-2019
University City Transportation and Management Association of Sweetwater, Inc.

Dear Mr. Wolfe:

The City of Sweetwater ("Sweetwater") strongly supports the FY2018-2019 FDOT Service Development Grant (SDG) proposal for $500,000 submitted by the University City Transportation and Management Association of Sweetwater, Inc. ("UTMA"). The requested funds as described within the proposal reflect an investment in very smart transit by providing adequate operating funds to support the near-term goals and objectives of the UTMA community transit within our community.

FIU has indicated that they will commit $100,000 in funding in each of three fiscal years (FY 2016-2017, FY 2017-2018, and FY 2018-2019) in order to support the UTMA operations of the CATS Shuttle service as described in this FY2018-2019 FDOT SDG proposal and elsewhere. Sweetwater has made a similar commitment, subject to City Commission approval of annual appropriations, in the amount of $400,000 to be paid to UTMA for FY2016-2017, FY2017-2018, and FY2018-2019 to provide comprehensive University City community transit services in Sweetwater. With the proposed $500,000 FY 2018-2019 FDOT Service Development Grant, the total operating funding will enable the continuing operations of a viable and vibrant community transit program that will soon be functioning as advanced community transit and feeder bus services in the near and long term.

If you have any questions or need additional information, please do not hesitate to email me at blong@fiu.edu or call me at 305-445-4538.

With kind regards,

Mayor Orlando Lopez
City of Sweetwater

Cc: The Honorable Carlos Gimenez, Mayor of Miami-Dade County
Mr. Jim Wolfe  
District Six Secretary  
Florida Department of Transportation District Six  
1000 NW 111 Avenue  
Miami, Florida 33172

Re: FDOT Service Development Grant FY 2018-2019  
University City Transportation and Management Association of Sweetwater, Inc.

Dear Secretary Wolfe:

Florida International University (FIU) strongly supports the FY2018-19 FDOT Service Development Grant (SDG) proposal for $500,000 submitted by the University City Transportation and Management Association of Sweetwater, Inc. (UTMA). The requested funds as described within the proposal reflect an investment in very smart transit by providing adequate operating funds to support the near-term goals and objectives of the UTMA community transit within our community.

FIU is pleased to commit $100,000 in UTMA funding in each of three fiscal years (FY 2016-17, FY 2017-18, and FY 2018-19) in order to support the UTMA operations of the CATS Shuttle service as described in this FY2018-2019 FDOT SDG proposal and elsewhere. Sweetwater has made a similar commitment, subject to City Commission approval of annual appropriations, in the amount of the $400,000 to be paid to UTMA for FY 2016-17, FY 2017-18, and FY 2018-19 to provide comprehensive University City community transit services in Sweetwater.

With the proposed $500,000 FY 2018-19 FDOT Service Development Grant, the total operating funding will enable the continuing operations of a viable and vibrant community transit program that will soon be functioning as advanced community transit and feeder bus services in the near and long term.

If you have any questions or need additional information, please do not hesitate to email me at kjessell@fiu.edu or call me at 305-348-2101.

With kind regards,

Kenneth A. Jessell, Ph.D.  
Senior Vice President for Finance and Chief Fiscal Officer and Professor

cc: The Honorable Orlando Lopez, Mayor, City of Sweetwater  
The Honorable Carlos Gimenez, Mayor of Miami-Dade County
11. Exhibits
A. UniversityCity Transportation and Management Association of Sweetwater, Inc.

Certificate of Status

I certify from the records of this office that UNIVERSITYCITY TRANSPORTATION AND MANAGEMENT ASSOCIATION OF SWEETWATER, INC. is a corporation organized under the laws of the State of Florida, filed electronically on May 29, 2015, effective May 29, 2015.

The document number of this corporation is N15000005446.

I further certify that said corporation has paid all fees due this office through December 31, 2015, and its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

I further certify that this is an electronically transmitted certificate authorized by section 15.16, Florida Statutes, and authenticated by the code noted below.

Authentication Code: 150529172751-600273472556#1

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Twenty Ninth day of May, 2015

Ken Detzner
Secretary of State
Electronic Articles of Incorporation
For

UNIVERSITYCITY TRANSPORTATION AND MANAGEMENT ASSOCIATION OF SWEETWATER, INC.

The undersigned incorporator, for the purpose of forming a Florida not-for-profit corporation, hereby adopts the following Articles of Incorporation:

Article I
The name of the corporation is:
UNIVERSITYCITY TRANSPORTATION AND MANAGEMENT ASSOCIATION OF SWEETWATER, INC.

Article II
The principal place of business address:
500 SW 109TH AVENUE
SWEETWATER, FL. 33174

The mailing address of the corporation is:
500 SW 109TH AVENUE
SWEETWATER, FL. 33174

Article III
The specific purpose for which this corporation is organized is:
TO UNDERTAKE ACTIVITIES THAT DEVELOP, OPERATE, AND MANAGE A SMART PARKING AND SMART COMMUNITY TRANSIT SYSTEM TO SERVE THE NEEDS OF ITS MEMBERS AND THE COMMUNITY PER S.501(C)3 THE IRS CODE.

Article IV
The manner in which directors are elected or appointed is:
AS PROVIDED FOR IN THE BYLAWS.

Article V
The name and Florida street address of the registered agent is:
RALPH VENTURA
500 SW 109TH AVENUE
SWEETWATER, FL. 33174

I certify that I am familiar with and accept the responsibilities of registered agent.

Registered Agent Signature: RALPH VENTURA
Article VI
The name and address of the incorporator is:

Ralph Ventura
500 SW 109th Avenue
Sweetwater, FL 33174

Electronic Signature of Incorporator: Ralph Ventura

I am the incorporator submitting these Articles of Incorporation and affirm that the facts stated herein are true. I am aware that false information submitted in a document to the Department of State constitutes a third degree felony as provided for in § 817.155, F.S. I understand the requirement to file an annual report between January 1st and May 1st in the calendar year following formation of this corporation and every year thereafter to maintain "active" status.

Article VII
The initial officer(s) and/or director(s) of the corporation is/are:

Title: P.D.
Orlando Lopez
500 SW 109th Avenue
Sweetwater, FL 33174

Title: VP.
Jose M Diaz
500 SW 109th Avenue
Sweetwater, FL 33174

Title: S.T.
Tom Gustafson
11200 SW 8th Street, PC523
Miami, FL 33199

Article VIII
The effective date for this corporation shall be:

05/29/2015

(See separate attachment for UTMA@Sweetwater Articles of Incorporation and Bylaws, as fully executed)
B. Sweetwater Trolley – Current Service
Know the law
Under County Ordinance #300, the following acts are considered unlawful on any transit vehicle or any part of the transit system:

- Pending or hindering bus or train operations in the performance of their duties.
- Playing any radio, television, cassette player, recorder or other sound-producing device with electronic audio, or video playback device or musical instrument without the use of earphones.
- Creating a nuisance and using any insulting or obscene language.
- Carrying, transporting or igniting any explosive, fireworks, acid or flammable liquids.
- Eating, drinking, or carrying an open container of food or beverage.
- Smoking or spitting inside the bus or trolley.
- Blowing or spreading any bodily discharge on bus or trolley.
- Gambling, soliciting or carrying on illicit business.
- Littering, vandalizing or defacing transit property. Prohibited activities include, but are not limited to the unauthorized marking of any part of the bus or trolley with spray paint and other marking substances, graffiti, the cutting or mutilation of seats on buses or trolleys.
- Placing any obstruction or barrier on bus or trolley guideway doors.
- Boarding bus or trolley with animals or pets that are not in properly enclosed containers, such as cages, kennels, or other pet carriers like bags and backpacks while inside the bus or trolley provided that the pet will not represent a threat to or interfere with other passengers, or that the pet and/or container will not interfere with the operation of the bus or trolley. All pets/animals and / or containers must be kept out of the aisles and steps, while aboard bus or trolley.
- The size of the container may not impede a passenger's egress from the vehicle bus or trolley; this excludes service animals (i.e., guide dogs, signal dogs, or other animals individually trained to perform task for customers with a disability).

- Making a false report of conduct on the operation of, or a threat concerning any of the transit system.
- Bringing or operating a bicycle inside a bus or trolley.
- Illegally operating transit equipment that is not intended for public use, or when it is not necessary in an emergency situation.
- Interfering with operation of transit vehicle doors.
- Taking still, sound or motion picture recording for commercial, training or educational purposes (exception of news coverage), without prior written authorization by STS (Sweetwater Transit System) or the city manager.
- Posting any advertisements, literature, signs, handbills, drawings or pictures without written authorization by STS (Sweetwater Transit System) or the city manager.
- Abandoning any personal property on any part of the transit system.
- Freepassing on the transit system or entering any restricted area.
- Assaulting a transit employee.

(FL STATUTE 784.07)

Individuals violating these ordinances and statues subject to arrest.

Lost and found
Before leaving an STS vehicle, always check for personal packages and belongings. If you do forget something, call lost and found 786-507-4850, Monday through Friday, 8 a.m. until noon and from 1 p.m. to 4:00 p.m.
Know the law
Under County Ordinance 8808, the following acts are considered unlawful on any transit vehicle or any part of the transit system:

- Firing or hindering bus or train operations in the performance of their duties.
- Playing any radio, television, cassette player, recorder or other sound-producing device/electronic audio or video playback device or musical instrument without the use of earphones.
- Carrying a nuisance and using any insulting or obscene language.
- Carrying, transporting or igniting any explosive, fireworks, gun or flammable liquid.
- Eating, drinking, or carrying an open container of food or beverage.
- Smoking or spitting inside the bus or trolley.
- Blowing or spitting any bodily discharge on bus or trolley.
- Gambling, soliciting or carrying on illicit business.
- Littering, vandalizing or defacing transit property.
- Prohibiting activities include, but are not limited to the unauthorized marking of any part of the bus or trolley with spray paint and other marking substances, graffiti, the cutting or defacement of signs on buses or trolleys.
- Placing any obstruction or barrier on bus or trolley guideway doors.
- Boarding bus or trolley with animals/pets that are not in properly enclosed containers, such as cages, kennels, or other pet carriers like bags and backpacks while inside the bus or trolley provided that the pet will not represent a threat to or interfere with other passengers, or that the pet and/or container will not interfere with the operation of the bus or trolley. All pets/animals and/or containers must be kept out of the aisles and steps, while aboard bus or trolley. The size of the container may not impede a passenger’s egress from the vehicle bus or trolley; this excludes service animals (i.e. guide dogs, signal dogs, or other animals individually trained to perform task for customers with a disability).
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(FL STATUTE 784.07)

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Before leaving an STS vehicle, always check for personal packages and belongings. If you do forget something, call lost and found 786-507-4850, Monday through Friday, 8 a.m. until noon and from 1 p.m. to 4:00 p.m.

City of Sweetwater Transit System
10890 NW 17th Street
Sweetwater, Florida 33178
Phone: 786-507-4850
Fax: 786-439-1438
www.cityofsweetwater.fl.gov
Green Route / Bus

- 10751 W. Flagler Street – Food star Supermarket
- 10910 W. Flagler Street – My Pueblo Restaurant
- 7th Terrace SW 110th Avenue / Stop Sign
- 10983 SW 4th Street / Miami Dade bus stop
- CITY HALL, PD STATION & MD CLERK OF COURTS
- 500 SW 110th Avenue Sweetwater, Florida
- CITY OF SWEETWATER – PASSPORT OFFICE
- 512 SW 110th Avenue Sweetwater, Florida
- 7th Street SW 110th Avenue / Stop Sign
- 7th Terrace SW 110th Avenue / Stop Sign
- 7th Terrace SW 113th Avenue – exercise / Comer
- JORGE MAR CANOSA YOUTH CENTER/Nonacci Park
- 292 SW 114th Avenue Sweetwater, Florida
- 11495 W. Flagler St – Roble & Social Security Office
- 1137th Avenue NW 1st Street / Miami Dade bus stop
- 11490 NW 2nd Street / Miami Dade bus stop
- 11530 NW 2nd Street / Miami Dade bus stop
- 4th Lane NW 114th Ave / MD bus stop
- 4th Street NW 112th Avenue / Miami Dade bus stop
- 11239 NW 5 Street – Voix Academy / MD bus stop
- 1123th Avenue NW 2nd Terrace / Miami Dade bus stop
- 1124th Avenue NW 1st Street / Miami Dade bus stop
- 1120 W. Flagler St – Tower Plaza / MD bus stop
- 1127th Avenue SW 2nd Street / Miami Dade bus stop
- 606 SW 117th Avenue
- 7 Terrace SW 114th Avenue
- 5 Terrace SW 115th Avenue
- 2nd Street SW 115th Avenue
- 11400 W. Flagler Street – Flager Center / MD bus stop
- 11388 W. Flagler Street / Miami Dade bus stop
- 1137th Avenue W. Flagler Street / Miami Dade bus stop
- 1138th W. Flagler Street / Miami Dade bus stop
- 10900 W. Flagler Street-Finch Line gas / MD bus stop
- 10708 W. Flagler St - Madison Rest. / MD bus stop
- 10722 W. Flagler Street – Sedanos Super Market
- 10780 W. Flagler Street – Walgreens
- 10600 W. Flagler Street – Chase Bank / MD bus stop
- 10500 W. Flagler Street – AC Donald / MD bus stop
- 10313 W. Flagler Street / Miami Dade bus stop
- 10198 W. Flagler St-Sunoco Gas Station / MD bus stop
- 10044 W. Flagler Street – Plaza De El Rey – Navarro
- 953 W. Flagler / last stop on right
- Park Hill Plaza / Wm Dixie-9565 Flagler St
- Ruben Dario Park 9825 W. Flagler
- 10200 W. Flagler St / MD bus stop
- 102 Ave SW 2nd Street
- 102d Avenue SW 4th Street / Stop Sign
- 10600 SW 4th Street / Elderly Center
- 10750 SW 4th Street / Sweetwater Towers

Blue Route / Trolley

- 171st Street NW 110th Avenue
- DOLPHIN MALL 1601 NW 12th St Sweetwater
- Entry #5 – Burlington Coat Factory
- Marshalls
- Entry #4 – Sacks Fifth Avenue Outlet. ROSS
- Main Entrance – Texas Brazili.
- Entry #2 – Old Navy.
- Bass Pro Shop.
- DOLPHIN MALL Bus Stop
- 11698 NW 25th Street – US Postal Service
- 10730 NW 25th Street – La Corvaca
- 1850 NW 20th Avenue – BP gas station/ MD bus stop
- 1500 NW 107th Ave – County Federal Credit Union
- 1414 NW 107th Avenue – MD bus stop
- 1390 NW 107th Avenue – MD bus stop
- 10700 NW 7th Street / Miami Dade bus stop
- 10880 NW 77th Street – Lennar Corp. / MD bus stop
- 10900 NW 7th Street – Terra Nova / MD bus stop
- 11101 NW 7th Street – Sunshine Village
- 11301 NW 7th Street – Las Palmas
- 114th Ave NW 6th St – Solei Lake Condominium
- 114th Ave NW 4th St – Bristol Park (NW 114th Ave)
- 11501 NW 2nd Street
- 11593 NW 2nd Street
- 126th Avenue W. Flagler Street / MD bus stop
- 115th Avenue W. Flagler Street / MD bus stop
- 114th Avenue W. Flagler Street / MD bus stop
- 113th Avenue W. Flagler Street / MD bus stop
- 112th Avenue W. Flagler Street / MD bus stop
- 10900 W. Flagler St – Finish Line gas Station
- 10780 W. Flagler St / MD bus stop
- 10705 W. Flagler Street – Sedanos Super Market
- 10700 W. Flagler Street – Walgreens
- 10690 W. Flagler Street – Chase Bank / MD bus stop
- 10500 W. Flagler Street – AC Donald / MD bus stop
- 113 W. Flagler Street / MD bus stop
- 10984 W. Flagler Street – Plaza De El Rey – Navarro
- 95c W. Flagler / last stop on right
- Park Hill Plaza / Wm Dixie
- Ruben Dario Park 9825 W. Flagler
- 100th Ave. W. Flagler St / MD bus stop
- 101 Avenue W. Flagler Street
- 102 Avenue W. Flagler Street
- 103 W. Flagler Street
- 1055 W. Flagler Street – FIU Engineering Center
- 10555 W. Flagler St – My Pueblo Rest. / MD bus stop
- CITY HALL, PD STATION & MD CLERK OF COURTS
- 500 SW 110th Avenue Sweetwater, Florida
- CITY OF SWEETWATER – PASSPORT OFFICE
- 512 SW 110th Avenue Sweetwater, Florida
- 12 Street SW 108th Avenue – FIU SOUTH CAMPUS
- 1323 SW 107th Avenue – Public / MD bus stop
- 1225 SW 107th Ave – Palmer House / MD bus stop
- 595 SW 107th Avenue / Miami Dade bus stop
- 10155 W. Flagler Street – FIU Engineering Center
- 561 NW 107th Ave – West Lake Village / MD bus stop
- 695 NW 107th Ave - Tropical Super Market
- 14235 NW 107th Ave – Macys and Old Navy
C. CATS Shuttle – Current Service

The CATS shuttle is a free service from the Modesto A. Maidique Campus to the Engineering Center.

The service has two additional stops at Miami-Dade transit hub at 107th Ave and 17th St and at 109th Tower housing facility in Sweetwater.

See CATS Shuttle schedule below,

(see http://parking.fiu.edu/Transportation/Pages/CATS.aspx)
12. University City Prosperity Project Illustrations

Image 2 - University City Prosperity Project: Signature Bridge, Sweetwater "Main Street" and Plaza
13. References


[4] Agreement Between UniversityCity Transportation and Management Association of Sweetwater, Inc. (UTMA) and Limousines of South Florida, Inc. (LOSF), to be published at https://www.goutma.org/documents


[10] Public Transportation Joint Participation Agreement (JPA) as fully executed last February 1, 2016 at http://cake.fiu.edu/TIGER2013/drop/post_submittal/PublicTransportationJPA_G0323-%20FE.pdf; and, one year time extension granted for that JPA dated October 10, 2016 at


[26] TIGER Award Agreement at http://cake.fiu.edu/TIGER2013/20140605_FIU-US_DOT_Fully_Executed_TIGER_UniversityCity_Agreement_.pdf

[27] TIGER Award Agreement Addendum No. 1 at http://cake.fiu.edu/TIGER2013/drop/add_sub_docs/FL_UnivCity_FY13TIGER_GrntAgree_AddNo_1_FINAL_SIGNED_JAN_2016_GRNT_AGREE_REV.pdf


[30] A Florida Department of Environmental Projection proposal submittal is due June 23, 2017 for eligible projects that seek to reduce diesel emissions using funds provided for by Volkswagen Mitigation Trust Fund is discussed at https://www.dep.state.fl.us/air/about_air/volkswagen-Settlement.htm. Florida’s share of these nationally dispersed funds is $152 million.

[31] Freebee at https://ridefreebee.com/

[32] City of Sweetwater: Proposed Comprehensive Plan Amendments; EAR-Based Amendments & Capital Improvements Element Annual Update. Florida International University Metropolitan Center, June 1, 2011.


[37] City of Sweetwater: City of Sweetwater Transit Schedule: http://www.cityofsweetwater.fl.gov/transit.html

[38] Florida International University: CATS Shuttle Schedule: http://parking.fiu.edu/Transportation/Pages/CATS.aspx